Environmental Toxicology and Water Quality

VOLUME CONTENTS

VOLUME 8, NUMBER 1 FEBRUARY 1993

Resistance to Antibiotics and Heavy Metals in *Escherichia coli* from Marine Fish / **1**
A. Alves de Lima e Silva and E. Hofer

Virulence Characteristics of Heterotrophic Bacteria Commonly Isolated from Potable Water / **13**
D.J. Lye and A.P. Dufour

Bioaccumulation and Depuration of Ethylene Glycol by Crayfish (*Procambarus spp.*) / **25**
G.A. Khoury, A.A. Abdelghani, and A.C. Anderson

Agents that Enhance or Reduce Movement of Mobile Genetic Elements: Detection in Microbial Assays and Implications for Toxicological Assessment / **33**
D.G. MacPhee

Sensitivity of Planktonic Photosynthesis to Various Toxicants in the River Rhine / **51**
D.M.J. Tubbing, E.D. de Ruyter van Steveninck, and W. Admiraal

Toxicity of Cyanobacteria to Mosquito Larvae—Screening of Active Compounds / **63**
J. Kiviranta, A. Abdel-Hameed, K. Sivonen, S.I. Niemelä, and G. Carlberg

Effect of Copper, Herbicides, and a Mixed Effluent on Chemoattraction of *Tetrahymena pyriformis* / **73**
R.O. Roberts and S.G. Berk

A Quantitative Structure—Activity Relationship Study and Ecotoxicological Risk Quotient for the Protection from Chemical Pollution / **87**
Y. Yoshioka and Y. Ose

TECHNICAL METHODS SECTION
Activated Mutatox Assay for Detection of Genotoxic Substances / **103**
B.T. Johnson

VOLUME 8, NUMBER 2 MAY 1993

Potential Ecotoxic Effects Probe (PEEP): A Novel Index to Assess and Compare the Toxic Potential of Industrial Effluents / **115**
G. Costan, N. Bermingham, C. Blaise, and J.F. Ferard

Issues in Fishery Products Safety in the United States / **141**
F.E. Ahmed

Protein Production During Heat Stress and Exposure to Toxicants in *Alcaligenes eutrophus* JMP228 / **153**
P.S. Amy, H.D. Hiatt, and R.K. Dupre

Genotoxicity of Chlorine-Treated Amino Acids / **163**
S.-I. Nakamura, M. Ugawa, and H. Obana

Detecting Membrane Impairment Caused by Xenobiotics / **173**
W. Pauli, S. Berger, M. Köhler, and A. Gies

Biological and Chemical Aspects of Differences in Sensitivity of Natural Populations of Aquatic Bacterial Communities Exposed to Copper / **191**
D.M.J. Tubbing, L.-R. Santhagens, W. Admiraal, and P. van Beelen

Intoxication of Euglena Cells by Tributyltin Chloride and Its Detoxication by Pretreatment with High Electric Field Loaded Water / **207**
T. Suzuki, N. Takahashi, K. Fukunaga, M. Okamura, T. Tanaka, and K. Takama

Direct Toxicity Assessment of Solid Phase Samples Using the Toxi-Chromotest Kit / **223**
K.K. Kwan

TECHNICAL METHODS SECTION
Determination of the Primary Biodegradability of Water-Soluble and Water-Insoluble Chemicals / **231**
D. Liu

VOLUME 8, NUMBER 3 AUGUST 1993

Water Quality of the River Nile. III. Toxicity Assessment of Six Industrial Effluents Polluting the River Nile / **239**
M.I. Abdel-Hamid, S.A. Shaaban-Dessouki, and O.M. Skulberg

Interactive Toxic Effect and Bioconcentration between Cadmium and Chromium Using Continuous Algal Culture / **255**
I. Aoyama and H. Okamura

Precision of the *Nitocra spinipes* Acute Toxicity Test and the Effect of Salinity on Toxicity of the Reference Toxicant Potassium Bichromate / **271**
G. Dave, E. Björnestad, H. Efraimsen, and M. Tarkpea

Sulfate Elimination to Improve Water Quality of Mine Process Effluents. I. Sequencing Batch Bioreactor Growth Kinetics of *Desulfovibrio desulfuricans* / **279**
L. Herrera, S. Duarte and J. Hernandez

The Allium Test in Wastewater Monitoring / **291**
G. Fiskesjö

Ecotoxicity Testing of Heavy Metals Using Methods of Sediment Microbiology / **299**
W. Reichardt, S. Heise, and L. Piker

Pseudomonas aeruginosa and Other Microbial Indicators of Pollution in Fresh and Marine Waters of Rio de Janeiro, Brazil / **313**
V.F. Guimarães, M.A.V. Araújo, L.C.S. Mendonça-Hagler, and A.N. Hagler

An Amperometric Algal Biosensor for Herbicide Detection Employing a Carbon Cathode Oxygen Electrode / **323**
P. Pandard and D.M. Rawson

Levels of Heavy Metals in Biota from the La Plata River / **335**
N.R. Verrengia-Guerrero and E.M. Kesten

TECHNICAL METHODS SECTION
Direct Solid Phase Toxicity Testing Procedure / **345**
K.K. Kwan

VOLUME 8, NUMBER 4 NOVEMBER 1993

Interaction Effect, Food Effect and Bioaccumulation of Cadmium and Chromium for the System *Daphnia magna–Chlorella ellipsoidea* / **351**
A. Kungolos and I. Aoyama

Monitoring São Paulo State Rivers in Brazil for Mutagenic Activity Using the Ames Test / **371**
G.U. Valent, M.I.Z. Sato, M. Cristina, L.S. Coelho, C.A. Coimbrão, P.S. Sanchez, M.T. Martins, and R. Bonatelli, Jr.

Fate and Toxicity Assessment of Linear Alkylbenzene Sulfonates in Drinking Water Using the Ames Test / **383**
J. Romera, F. Ventura, J. Caixach, J. Rivera, and R. Guerrero

A Comparison of Four Simple Water Extraction–Concentration Procedures to be Used with the Battery of Bioassay Tests Approach / **397**
B.J. Dutka, D.L. Liu, A. Jurkovic, and R. McInnis

Sulfate Elimination to Improve Water Quality of Mine Process Effluents. II. Hydrogen Sulfide Transport in Biological Reactors / **409**
L. Herrera, J. Hernández and S. Duarte

Seasonal Variations of *Microcystis* Species and Toxic Heptapeptide Microcystins in Lake Suwa / **425**
H.-D. Park, M.F. Watanabe, K.-I. Harada, M. Suzuki, H. Hayashi, and T. Okino

Using the Metabolic Capacity of Rhodobacter sphaeroides to Assess Heavy Metal Toxicity / **437**
C. Balsalobre, J. Calonge, E. Jiménez, R. Lafuente, M. Mouriño, M.T. Muñoz, M. Riquelme, and J. Mas-Castellà

Enzyme-Linked Immunosorbent Assay for Detection of Highly Virulent Strains of *Aeromonas hydrophila* and *Aeromonas sobria* in Water / **451**
S. Merino, S. Camprubi, M. Regué, and J.M. Tomás

TECHNICAL METHODS SECTION
A 2–3 Day Plant Test for Toxicity Assessment by Measuring the Mean Root Growth of Onions (*Allium cepa* L.) / **461**
G. Fiskesjo

Subject Index to Volume 8 / **471**

Volume Contents / **475**

Author Index to Volume 8 / **479**